

REMARKS

Reconsideration and allowance are respectfully requested in light of the above amendments and the following remarks.

A proposed change to Fig. 5 is enclosed with a Letter to the Official Draftsman.

Claims 1, 7, 9, 12-16, 20 and 22 have been amended. Support for the features added to claims 7, 14, and 16 is provided at least in the specification on page 15, line 18, through page 17, line 23.

Claims 1 and 13 were rejected, under 35 USC §102(e), as being anticipated by Korner (US 6,104,818). Claims 7, 9-12, 14, 16, and 22 were rejected, under 35 USC §102(e), as being anticipated by Papadopoulos et al. (US 6,504,937). Claims 1, 5, 6, 13, 15, 20, and 21 were rejected, under 35 USC §102(b), as being anticipated by Lininger (US 3,944,756). Claims 2 and 18 were rejected, under 35 USC §103(a), as being unpatentable over Lininger in view of Kubota et al. (US 5,635,670). Claims 3, 4, and 17 were rejected, under 35 USC §103(a), as being unpatentable over Lininger in view of Takuya (US 4,525,817). Claims 8 and 19 were rejected, under 35 USC §103(a), as being unpatentable over Papadopoulos in view of Kubota. To the extent these rejections may be deemed applicable to the amended claims, Applicant respectfully traverses.

Claim 1 now recites:

*A condenser microphone apparatus comprising:
a movable electrode which vibrates by an acoustic vibration;
a fixed electrode arranged so as to face said movable electrode;
a field effect transistor that buffer-amplifies a voltage across said movable electrode and a voltage across said fixed electrode;
a bypass capacitor in which one end is connected to a signal output terminal of said field effect transistor and the other end is connected to a common output terminal of said field effect transistor; and
a series resistor inserted at least in one of an interval between said signal output terminal of said field effect transistor and an output terminal of the apparatus and an interval between said common output terminal of said field effect transistor and a common output terminal of the apparatus.*

Korner fails to anticipate at least the features recited in claim 1 of: (1) a bypass capacitor in which one end is connected to a signal output terminal of a field effect transistor (field effect transistor) and the other end is connected to a common output terminal of the field effect transistor and (2) a series resistor inserted at least in one of an interval between the signal output terminal of the field effect transistor and an output terminal of the apparatus and an interval between the common output terminal of the field effect transistor and a common output terminal of the apparatus. Lininger fails to anticipate at least the feature recited in claim 1 of a bypass capacitor in which one end is connected to a signal output

terminal of the field effect transistor and the other end is connected to a common output terminal of the field effect transistor.

Korner discloses in Fig. 3 a field effect transistor 20 that buffer-amplifies a signal provided by a membrane 22 and a stationary electrode 24. Field effect transistor 20 does not have a bypass capacitor connected between its signal output terminal and its common output terminal, as recited in claim 1. Instead, only the emitter e of a transistor 18 is connected to the collector (i.e., drain) k of field effect transistor 20 (Korner col. 3, lines 13-15).

Moreover, Korner does not disclose a series resistor inserted at least in one of an interval between the signal output terminal of the field effect transistor and an output terminal of the apparatus and an interval between the common output terminal of the field effect transistor and a common output terminal of the apparatus. Fig. 8 of Korner lacks an electrical element in the interval between the common output terminal of the field effect transistor and a common output terminal of the apparatus. As for the interval between the signal output terminal of the field effect transistor and an output terminal of the apparatus, only a bipolar junction transistor 18, a capacitor 12, an amplifier 34, and an unlabeled capacitor exist in this interval.

No series resistor exists in either of the two paths recited in claim 1.

With regard to the rejection of claim 1 over the disclosure of Lininger, Lininger does not disclose a capacitor connected between the source and drain terminals of field effect transistor 90. Instead, Lininger discloses in Fig. 1: (1) two capacitors 110 and 112 are connected between the source terminal (as designated by Lininger in the specification, col. 4, lines 53-61) of field effect transistor 90 and ground and (2) a parallel circuit comprising a resistor 108 and a capacitor 114 is connected between the drain terminal of field effect transistor 90 and ground.

In accordance with the above discussion, the Applicant submits that neither Korner nor Lininger anticipate the invention defined by claim 1. Therefore, allowance of claim 1 and all claims dependent therefrom is warranted.

Independent claims 13 and 15 recite similar features to those of claim 1 distinguishing over Korner and Lininger. Accordingly, allowance of claims 13 and 15 and all claims dependent therefrom is warranted.

Independent claim 7 now recites:

*A condenser microphone apparatus comprising:
a movable electrode which vibrates by an acoustic
vibration;*

a fixed electrode arranged so as to face said movable electrode;

amplifying means for buffer-amplifying a voltage across said movable electrode and said fixed electrode, said amplifying means for providing the amplified voltage to a signal output transmission line;

a bypass capacitor in which one end is connected to a signal output terminal of said amplifying means and the other end is connected to a common output terminal of said amplifying means, said bypass capacitor operating to bypass a high frequency signal from an external circuit; and

a serial circuit of a blocking capacitor and a damping resistor, in which one end is connected to said signal output terminal of said amplifying means and the other end is connected to the common output terminal of said amplifying means, said serial circuit operating to damp a parallel resonance of an equivalent circuit, comprising said signal output transmission line, said bypass capacitor, and said serial circuit.

Papadopoulos fails to anticipated at least the claimed features whereby the bypass capacitor operates to bypass a high frequency signal from an external circuit and the serial circuit operates to damp a parallel resonance of an equivalent circuit, comprising the signal output transmission line, the bypass capacitor, and the serial circuit.

The Office Action analogizes Papadopoulos' capacitor C2 to the claimed blocking capacitor, Papadopoulos' resistor R2 to the claimed damping resistor, and Papadopoulos' capacitor C3 to the claimed bypass capacitor.

However, Papadopoulos' resistor R2 is a load resistor that provides similar functionality to load resistor 32 illustrated in related art Fig. 2 of the present application. Together,

Papadopoulos' load resistor R2 and capacitor C3 provide a low pass filter for an electric mic 102 having a corner frequency of 1.8 Khz (Papadopoulos col. 3, lines 60-64). Papadopoulos' inductor L1 and capacitor C2 establish a stable mic bias voltage source of 2.0 volts (col. 3, lines 55-58) to reduce the noise that is superimposed on the mic's power supply.

Papadopoulos does not disclose a bypass capacitor that operates to bypass a high frequency signal from an external circuit and a serial circuit that operates to damp a parallel resonance of an equivalent circuit, comprising the signal output transmission line, the bypass capacitor, and the serial circuit..

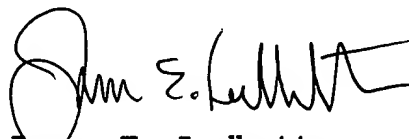
In accordance with the above discussion, Applicant submits that Papadopoulos does not anticipate the invention defined by claim 7. Therefore, allowance of claim 7 and all claims dependent therefrom is warranted.

Independent claims 14 and 16 recite similar features to those of claim 7 distinguishing over Papadopoulos. Therefore, allowance of claims 14 and 16 and all claims dependent therefrom is warranted.

In view of the above, it is submitted that this application is in condition for allowance and a notice to that effect is respectfully solicited.

If any issues remain which may best be resolved through a telephone communication, the Examiner is requested to telephone the undersigned at the local Washington, D.C. telephone number listed below.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "James E. Ledbetter", with a stylized flourish at the end.

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JEL/DWW/att

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